

REMARKS

Summary of Office Action

Claims 1-28 and 37-51 were pending in the above-identified patent application, claims 29-36, 52 and 53 having previously been cancelled.

The Examiner finally rejected claims 1-3, 16-23, 37-40, and 42-51 under 35 U.S.C. 103(a) as allegedly being obvious from Ding et al. U.S. Patent No. 7,058,880 in view of Walker et al. U.S. Patent No. 6,845,472.

Each of claims 4-15 and 41 was objected to depending from a rejected base claim, but allowable subject matter was indicated. Claims 24-28 were allowed.

Summary of Applicants' Reply

Applicants note with appreciation the allowance of claims 24-28, and the continued indication of allowable subject matter in claims 4-15 and 41. Applicants again expressly reserve the right to rewrite any one or more of claims 4-15 and 41 in independent form should its respective base claim ultimately not be allowed.

Applicants have proposed amending claims 1, 4, 20, 37, 45 and 49, and have proposed adding new claims 54 and 55, in order to more particularly define the invention. The Examiner's rejection is respectfully traversed.

Applicants' Reply to the
Rejection Under 35 U.S.C. § 103

Claims 1-3, 16-23, 37-40, and 42-51 were finally rejected under 35 U.S.C. 103(a) as allegedly being obvious from Ding in view of Walker. This rejection is respectfully traversed.

Applicants' proposed amended independent claims 1, 20, 37, 45, and 49 are directed towards circuits and methods for correcting errors in configuration data stored on a programmable logic device. Configuration data and error check

data associated with the configuration data are stored in a memory incorporated in the programmable logic device. The configuration data are retrieved and analyzed to determine if any values have changed after initial configuration of the memory and to correct any values that have changed.

As previously stated by applicants, neither, Ding, Walker, nor the combination thereof, shows or suggests the claimed invention in which both configuration data and error check data associated with the configuration data are stored in the same memory, as required by applicants' claims. Applicants previously pointed out that Walker teaches a system in which various bits of a data word are stored on different memory devices mounted on different DIMMs (Dual Inline Memory Modules) of different memory cartridges, and in which the parity error-checking bits of the data word are themselves stored on still a different memory cartridge than the data bits, and that Walker thus teaches storing error-check data in a memory separate from the memory storing the configuration data.

In response, in the current Office Action, the Examiner has stated that the multiple physical memory modules of Walker nevertheless "constitute one memory unit." Applicants have proposed amending their claims to clarify that the claimed "memory" is a single memory incorporated in a programmable logic device, not separate modules that are merely electrically connected.

This distinction is not insignificant. When the configuration data and error check data are stored in separate physical devices, external conditions that affect one memory -- and therefore the data within it -- may not affect the other memory or the data within it. On the other hand, when the configuration data and error check data are stored in the same physical device, it is much less likely that one could be affected without the other. Therefore, having both sets of data within a single physical device makes it much more likely that errors will be detected, and therefore corrected.

For at least these reasons, applicants respectfully submit that claims 1-3, 16-23, 37-40, and 42-51 are patentable.

New Claims 54 and 55

Applicants have proposed adding new claims 54 and 55 in order to more particularly define the invention. These claims, which depend from claims 20 and 1, respectively, and therefore should be patentable for the reasons discussed above, further incorporate some of the limitations of allowable claim 4, and applicants believe that they should be patentable for that reason as well.

Statement Under 37 C.F.R. § 1.116(b)(3)

Applicants respectfully request that the amendments presented herein be entered under 37 C.F.R. § 1.116(b)(3). Applicants believe that the proposed amendments place this application in condition for allowance. These amendments were not presented earlier because applicants believed that their previous reply was a good faith effort to advance the prosecution of this application and that the amendments and arguments presented at that time were sufficient to place the application in condition for allowance. Applicants believe that that constitutes "good and sufficient cause why the [present] amendment is necessary and was not earlier presented."

Conclusion

In view of the foregoing, applicants respectfully submit that this application, as amended, including claims 1-28, 37-51, 54 and 55 is in condition for allowance.

Reconsideration, entry of the proposed amendments, and prompt allowance of this application are respectfully requested.

Respectfully submitted,

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